AMENDMENTS TO THE CLAIMS:

Please cancel without prejudice claims 15 and 16.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) A coherent laser radar (lidar) device having a transmitter portion that comprises a single wavelength laser source, a converter for producing a combined light beam that comprises at least two component light beams of discrete wavelength from the output of said single wavelength laser source, and transmit optics to direct the combined light beam to a remote target, wherein each component light beam of the combined light beam traverses the same optical path from the single wavelength laser source to the transmit optics.

2. (previously presented) A device according to claim 1 wherein a receiver portion is additionally provided that comprises receive optics to collect light returned from the remote target and a coherent detector.

3. (previously presented) A device according to claim 2 wherein each component light beam collected by the receive optics traverses the same optical path from the receive optics to the coherent detector.

4. (previously presented) A device according to claim 1 wherein the converter comprises an electro-optic modulator (EOM).

5. (original) A device according to claim 4 wherein the EOM is electrically driven to provide at least three component light beams of discrete wavelength.

6. (previously presented) A device according to claim 4 wherein the EOM is electrically driven to provide at least five component light beams of discrete wavelength.

7. (previously presented) A device according to claim 4 wherein the transmitter portion additionally comprises a polarisation controller.

8. (previously presented) A device according to claim 1 wherein the transmit portion further comprises at least one optical amplifier.

9. (previously presented) A device according to claim 1 wherein a frequency shifter is provided to introduce a frequency shift between the laser beam received by the converter and its associated local oscillator signal.

10. (previously presented) A device according to claim 1 wherein at least some of the optical components of the device are interconnected via optical fibre cable.

11. (original) A device according to claim 10 wherein the local oscillator beam is coupled from the transmitter portion to a receiver portion via an optical fibre delay line.

12. (previously presented) A device according to claim 1 wherein separate transmit optics and receive optics are provided.

13. (previously presented) A device according to claim 1 wherein the wavelength of one of the at least two component light beams is selected to coincide with a peak in absorption of a gas species of interest.

14. (previously presented) A device according to claim 13 wherein the wavelength of at least one of said at least two component light beams is varied when the detected return signal falls below a threshold level.

15. (cancelled).

16. (cancelled) .